

IN THE CLAIMS

1. (Original) A process for removing a solvent from a first solution, said process comprising:

a) positioning a selective membrane between the first solution and a second solution having a higher osmotic potential than the first solution, such that solvent from the first solution passes across the membrane to dilute the second solution, and

b) extracting solvent from the second solution by passing the diluted second solution through a nanofiltration membrane, wherein the nanofiltration membrane is cast as a skin layer on a support, and the separation properties of the nanofiltration membrane are controlled by the pore size and electrostatic properties of the skin layer.

2. (Original) A process as claimed in claim 1, wherein the nanofiltration membrane is suitable for the separation of components that are 0.001 to 0.01 microns in size.

3. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, wherein the second solution is prepared by introducing a known quantity of solute into a known quantity of solvent.

4. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, which comprises dividing the diluted second solution from step a) into a first portion and a second portion, extracting solvent from the first portion by passing the first portion through the

nanofiltration membrane of step b), and extracting solvent from the second portion by crystallization and/or distillation.

5. (Original) A process as claimed in claim 4, wherein the residue from the nanofiltration step b) is treated by a crystallization and/or distillation technique.

6. (Original) A process is claimed in claim 5, wherein the crystallization and/or distillation technique is selected from multi-flash distillation, multi-effect distillation, mechanical vapour compression, MED-thermo compression and rapid spray distillation.

7. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, wherein the second solution is an aqueous solution comprising at least one of magnesium sulfate ($\text{MgSO}_4 \cdot 6\text{H}_2\text{O}$ or $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$), sodium sulfate ($\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$), calcium chloride ($\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ or $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$), potassium alum ($24\text{H}_2\text{O}$), disodium hydrogenphosphate ($\text{Na}_2\text{HPO}_4 \cdot 12\text{H}_2\text{O}$), glucose, fructose and/or sucrose.

8. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, wherein the solvent of the second solution is the same as the solvent of the first solution.

9. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, wherein the solvent of the second solution is water.

10. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, wherein the first solution is a waste stream from an industrial or agricultural process or a domestic water stream.

11. (Currently Amended) A process as claimed in ~~any one of claims 1 to 10~~ claim 1, wherein the first solution is a saline solution.

12. (Original) A process as claimed in claim 11, wherein the saline solution is seawater or brackish water.

13. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, wherein the elevated pressure induced in the second solution by the influx of solvent from the first solution is used to assist in the extraction of solvent from the second solution.

14. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, wherein after solvent from the first solution passes across the membrane to dilute the second solution, the diluted second solution is contacted with one side of a further selective membrane and a further solution having a higher osmotic potential than the diluted second solution is contacted with the other side of the membrane, such that solvent from diluted second solution passes across the membrane to dilute the further solution.

15. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, wherein the second solution contains an additive selected from anti-scaling agents, corrosion inhibitors, anti-fouling agents and disinfectants.

16. (Original) A process as claimed in claim 15, wherein said second solution is circulated in a closed loop, such that said additives are reused.

17. (Currently Amended) A process as claimed in ~~any one of the preceding claims~~ claim 1, wherein the selective membrane of step a) has an average pore size of 5 to 50 Angstroms.

18. (Original) A process as claimed in claim 1, wherein the membrane has an average pore size of at least 10 Angstroms and the second solution contains solute species that are too large to pass through the pores of the membrane.

19. (Original) A process as claimed in claim 2, wherein the solute species in the second solution comprises at least one cationic species and/or at least one anionic species that is larger than the average pore size of the membrane.